COMPLETE CLAIM LISTING – SUPPLEMENTAL AMENDMENT

MARKED UP VERSION

Claims 1 to 10 (Canceled)

What is claimed is:

Claim 11. (Amended)

A system for creating and managing a stateless space with a shared memory area to for standardize~~ing~~ data and network topologies ~~and~~ by integrating computer generated histories wherein data is collectively evaluated to determine which data and data structures persists and continues to be distributed over time, comprised of the following:

an assembly process for connecting, breaking apart, and organizing data into groups as depicted in Figures 5 and 6 using advanced networks of machines to generate patterned exchange spaces based in logic;

wherein machines calibrate, simplify, and transform patterned groups of ideas and information into light and sound;

wherein logic and the definition of groups are essential features of system performance;

marking groups by time, location, and purpose;

drawing reference arcs;

implementing a topological record keeping function using virtual forms to represent~~ing~~ relative placement of data components within larger configurations portrayed in Figures 2, 3, 4, 5, 6, and 9 where topology and new pattern generation and recognition techniques

are applied to digital information context to place historical knowledge and new ideas into abstract streams as indicated in Figure 3 to see data become entangled, separated from background information, recognized from different points of view, interrelated and influenced over time;

wherein relative placement and flow are essential features of system performance;

a shared memory area for registering, intertwining, tracing, and comparing data histories in ~~infinitely large~~ groups organized by context and location as outlined in Figures 1, 2, 6, 7, 8 and 10C;

wherein knowledge and display patterns twist, rotate, and become aligned in a stateless space of higher dimensions than those experienced in daily life;

wherein machine and network operations are accomplished using mathematical techniques, modeling products and devices to create, capture, and record the topology of idea and information exchange over time;

wherein shapes and relationships shown by machines are studied through logic, algebra, geometry, knot theory topology and analysis techniques displayed through an evolving automatic language of alignment, density, color, texture and intensity;

wherein the automatic language is an essential feature of system performance;

control mechanisms for overlaying and streamlining similar data and data arrangements until there are no redundancies to enable the identification and ranking of originals as illustrated in Figures 3, 5, 6, 7B, and 10C;

wherein topologies merge by eliminating duplicative components with the express purpose of streamlining down to only one high quality original for each

component and each topological arrangement, thus changing dynamic shared data stores into sets of high quality maps to originals with no duplicative components or structures;

wherein this step prevents background information from being processed again to display the results of searches, knowledge assembly and investigation tasks that have already been completed correctly;

wherein the only information allowed to persist in dynamic shared data is of high quality, and captured maps between symbols are isolated for review and discussion independently from constant flows of background ideas and information, thus enabling the identification and ranking of originals to help determine which data and data arrangements should be preserved and distributed over the next 1000 years;

wherein the identification and ranking of originals by performing redundancy studies is an essential feature of system performance;

an address prioritizing system to characterize data deserving higher placement and broader distribution in future designs and automated assemblies executed by representing data in convenient units, then reducing the number of components displayed and processed at a given time by limiting the space patterned ideas and information are perceived to be in;

wherein similar records with overlapping descriptions are examined in a machine and across networks to compare previous user placements, proximities, and priority addresses captured, maintained, and shown within symbols;

wherein symbols are fixed into topologies as characterized in Figure 9 and transformed into multidimensional waveforms for compiling and broadcasting as set forth in Figure 10;

wherein relative flows of background information versus independent paces of change are revealed over time using links between addresses that are common to more than one symbol to automatically place optimized data and data arrangements on top and in front, making them clearer for broadcasting and compiling;

wherein topologies encapsulate, consolidate and automatically update only the relevant program functions required to read user specified groups of data and data arrangements in self-referring relationships, stamped in context, and made into machine readable copies for future user placement and priority addressing;

wherein address locations that appear in more than one topology are streamlined, united, and made more persistent to be automatically assigned priority being broadcast over networks, wherein this process is managed by concentrating on the display patterns;

wherein persistence is an essential feature of system performance;

compiler/broadcasters seeking and distributing specific information by type as recognized by ~~its~~ topology as introduced in Figures 10, 1, and 2 when continuous flows of ideas and information are pushed into streams as shown in Figure 3;

wherein Context Driven Topologies are prepared for interpretation by others when the reference arcs used to structure topologies stretch out, expand, and transform into continuous multidimensional waveforms for compact archiving, distribution, and comparison in purer form;

wherein compacted topologies unfold to become continuous cyclical irregular series of waves;

wherein each arc stays connected to the next arc in a series by changing

orientation from the end of one arc to the beginning of the next in the multidimensional waveform state because this is when topologies are purest for machines to rearrange, streamline and compile ideas and information to generate physical patterns ranging from very simple to intricately detailed and incredibly complex;

wherein, unless users are working with the topologies directly, underlying structures and operations are transparent while machines decode, encode, convert and calibrate waveforms and relationships between waveforms based on their topological properties using mathematical patterns, imagery and sounds for recognition;

wherein by default, groups of reference arcs become arranged into spiraling seashell patterns where tighter arcs representing tightly connected components and ideas are pushed to the top, and looser connections automatically fall into the background, the user controls the amount of information presented at one time, in some cases, tight connections are too obvious and users prefer to go deeper to make new connections, when this happens even if the components are not changed, the invention is used to reprioritize, restructure and flip the shape to show a topology from a different angle and orientation; these actions are accomplished working through the topologies directly rather than through the original information ~~itself~~;

wherein default patterns and working with topologies directly are essential features of system performance;

wherein related portions of multidimensional waveforms are overlapped and combined by machines before the original information is retrieved, if only tight connections are acceptable, only the specified radius and range are recognized, data relationships are also specified and recognized by rotational alignment,

therefore, when topologies become interrelated and refer to each other, the radii and rotational alignments begin to streamline and standardize to automate data arrangements for repetitive, specific uses;

wherein knowledge and display patterns to compare and contrast flows of changes over time leads to deep insights and predictions users or machines may not have been aware of until using the invention, thus the right to make the first set of patterns is exclusively claimed to ensure implementation is accomplished as specified;

wherein, Context Driven Topologies are used to access and interface with machine and network detected errors, establish pathways to growing collections of interesting useful details, simplifying deep patterns in background information not previously observed;

wherein comparison, contrast, measurement and simplification are essential features of system performance;

programming standards for broadcasting and compiling specified data configurations in context as sketched in Figures 2, 3, 4, 5, 6 where reference arcs are running from user propositions and display patterns on machines, transferring in and out of mathematical frameworks in the stateless space, traveling back to knowledge patterns in published records, and programming advanced networks of machines to delete irrelevant, outdated, misleading, incorrect, and redundant information without a person or research group expending resources to review the same results every time they are presented the same way;

wherein thresholds and tolerances for relevancy, correctness, and aesthetic preference vary by user, research group, machine and network;

wherein documentation of relevancy, correctness, and aesthetic preference is an essential feature of system performance;

wherein thresholds and tolerances are indicated by indelible marks recorded in the symbols to control the flow, persistence, and distribution of multidimensional waveforms;

wherein the symbols, marks, flow, persistence, and allocations of space in shared memory are subject to intense scrutiny, thus enabling greater trust for users to allow machines to decide what the most efficient methods are to consolidate irrelevant, outdated, misleading or incorrect, redundant information before data and data structures are dynamically retrieved or displayed;

wherein programming standards become typical across fields, for example, within the limitations of these claims the American Institute of Architects (AIA) could use the invention to create standard communication patterns for drawings and specifications, capture design intent and aesthetic preferences, and publish up to date building codes in local jurisdictions to control the presentation and retrieval of shared models, ideas and information architects use; wherein the example extends to more groups of users initiating patterns they are responsible for and maintain over time, able to change and update in small increments while still persisting as overall patterns; wherein the example is further extended when the methods of architects captured in the knowledge and display patterns of architects are applied by other fields to begin their own template, and architects borrow templates from engineers and city planners to incorporate into their communications patterns, whereby programming standards are made stronger and clearer by being allocated more space in shared memory;

wherein using templates and programming standards to allocate space in shared memory is an essential feature of system performance;

wherein data structures are preconfigured using standardized forms to limit the number of data components and forms of display by making components and combinations work together in approved contexts, or prevent data and structures

from working or being presented at all;

wherein defining acceptable versus unacceptable contexts is an essential feature of system performance;

wherein, Context Driven Topologies remain mathematically the same and recognizable for parallel machine processing ~~of limitless groups~~ in the stateless space regardless of the ways they are simplified and selectively distributed and displayed in real space and time.

Claim 12. (Amended) The system of claim 11, wherein representing the pace and extent of changes between different interpretations of the same data are expressed and analyzed through mathematical configurations, or knots of information, in ~~both~~ fixed and fluid forms as indicated in Figures 1, 3, 5, 6, 7, 9, 10;

wherein fluid ideas and information are made into fixed forms by original authors to be compared and consolidated by machines in shared memory, whereafter subsequent authors working with newer machines make new topologies to feed back into the stateless space as unique fixed forms for subsequent interpretations;

wherein the topologies are an embedded record control system for storing and retrieving information in dynamic relative motion by comparing fixed versions to fluid progress; where the more associations and applications each component and structure accumulates, the more this changes the edges and texture of multidimensional structures and topological boundaries;

wherein the boundaries are inherently dynamic, time and context dependent forms;

wherein measurable mathematical configurations of knowledge patterns working backwards in time are opposed by display patterns moving forwards in time to expose, streamline and weed out incorrect, temporary, or misleading information

from shared data and data structures allocated space in shared memory;

wherein shared data and structures are essential features of system performance.

Claim 13. (Amended) The system of claim 11, wherein machines are measuring the ways people are thinking, imagining, and working ~~using the for~~ to track~~ing~~ which data and data structures have ~~has~~ made sense together in the past;

wherein the system provides machines with arcs to measure, contrasts and comparisons to reflect patterns of human reasoning through radius, rotation, alignment, pace, density, texture, color, intensity and other techniques machines were already capable of measuring accurately in 2004;

wherein the purpose of machines measuring and creating patterns of human reasoning is for machines to help identify and create associations users are not capable of recognizing without machines;

wherein the invention is a new way to show machines related examples and similar versions to explain why some ideas and information are more important than others;

wherein communication with machines is an essential feature of system performance.

wherein machines and networks are proposing data components and ideal configurations while users are designing and constructing new assemblies;

wherein common histories captured in component descriptions are drawn together because machines always process sets together in parallel rather than hierarchies with foreground and background users need to interact with complex records;

wherein as duplicative components are gradually consolidated, components shift

and move to align as machines pull components that share aspects of their histories and descriptions closer together for more efficient processing of similar and repeated units;

wherein machine movement is caused by connections deep in the background unseen by most users except in the ways machine actions affect the display patterns;

wherein unseen connections are an essential feature of system performance.

Claim 14. (Amended)

The system of claim 11, wherein Context Driven Topologies are building virtual bridges between ideas and information that were not connected in the past;

wherein automated data descriptions leave indelible marks on data;

wherein introducing new combinations into the shared memory area maintains links between data ~~that may or may not be in proximity~~.

Claim 15. (Amended)

The system of claim 11, wherein new pattern generation and recognition techniques are implemented, demonstrating concurrent and conflicting ideas, information, and points of view becoming entangled;

wherein data becomes isolated and separated from background information;

wherein groups of ~~people~~ users and networks of machines are recognizing the same data differently from different points of view;

wherein ~~people~~ users are assembling and machines are displaying ideas and information interrelating and being influenced over time from larger, shared points of view.

Claim 16. (Amended)

The system of claim 11, wherein configuring, deriving and extracting data and data arrangements from dynamic shared data stores is driven by users existing knowledge, era, ~~and~~ region, and the machines and networks they are using, influencing the way each user or group of users ~~is looking~~ looks for data or sets~~ting~~ forth ~~a~~ communication and computational goals;

wherein all users and ~~devices~~ machines are given an identity as individuals and networks;

wherefore ~~people~~ users or machines without identities are not able to realize the entire benefit of the system.

Claim 17. (Amended)

A registry ~~method~~ system comprised of the following steps for fixing assembled topologies into symbols recognized ~~only~~ by machines over networks;

wherein boundaries representing information wholes in context are cleaned of potential ideas and information as indicated in Figures 2, 4, 5, 6, 8, 10A and 10C by opposing knowledge and display patterns in the shared memory area of the stateless space because display patterns are opposite, known twists to knowledge patterns and the two are used in combination to remove ideas and information that do not fit current arrangements;

wherein using knowledge and display patterns in combination is an essential feature of system performance;

wherein Context Driven Topologies represent continuous boundaries composed of

arcs that only link to specified components in approved sequences;

wherein existing boundaries are scaled to fit in new user defined configurations as exhibited in Figure 7B;

wherein topologies do not save whole dictionaries of languages, only sets of words in context, nor is space allocated for every processing technique available in a product or operating system because the only content, techniques, and arcs retained after compression and consolidation into a topological record are limited to only the portions required to precisely regenerate sets of numbers, symbols, words, images, sounds, and underlying structures in specific orders as originators have them placed;

wherein compressing, compacting, and allocating space to reflect original placement are essential features of system performance;

wherein users tell machines where to pay more attention to content and techniques known to be correct, preferred, or meeting specified performance requirements;

wherein these ideas and information are assigned more space, resolution, depth and clarity through an interactive data curation process;

wherein users specify the components and measurements to be automatically aligned, proportional, stacked or displayed in known preferred orders;

wherein underlying structures are never automatically aligned or placed without users participation because this is where adjustments occur to make each configuration unique; wherein configurations that are not unique are not duplicated or allocated space;

wherein adjustments and assessment of uniqueness are essential features of system

performance;

wherefore as retrieved and placed information receives more attention from users by being continuously displayed, more space and higher resolution are allocated in shared memory by networks and machines;

wherein Context Driven Topologies are built to last, able to be viewed from different angles, taken apart and put back together until the ideas and information they represent fall out of fashion, are proved to be incorrect or are abandoned causing the data and structures to be compressed into the background and gradually forgotten, rarely accessed, occasionally retrieved and updated to work within current programming standards when users and machines have the knowledge and instructions to seek and extract the essence of original data and data structures by cutting through layers of descriptions which would not be possible without advanced networks of machines role in topological record keeping;

wherein compressed records and instructions are essential features of system performance;

wherein patterns and the automatic language are displayed on machines and in recreated environments where known patterns lead users and machines to components and configurations designed to gravitate, snap, and lock into particular times or logical locations by fixing topologies ~~fixed~~ into ~~a~~ groups, fused into cohesive wholes by machines by being force fit into ~~a single~~ boundaries established by users;

wherein known patterns, gravitating, snapping, and locking into particular times and logical locations are essential features of system performance;

wherein boundaries are compressed into fixed symbols to serve as a single character in

each components existing unique identifiers including existing URLs, museum object numbers, article and publication numbers, geographic locations and place marks, subject matters by area in ~~the~~ shared memory, and systematically adaptable to all information identifiers and placements assigned by information originators and interpreters;

wherein the symbols are a boundary with selectively controlled edges as established in Figures 9 and 10 as if the symbols were characters, but topologies in the symbol state are not exactly like traditional data characters, they are of deeper dimensions and varying densities with related background information stacked underneath;

wherein selectively controlling edges is an essential features of system performance;

wherein fixed symbols are changed back and forth into fluid topologies, where by default, the last way an assembly was displayed before compression into a topology is always the first way it is regenerated, where if subsequent users want to examine ideas and information more closely and carefully, add or subtract components, the topological structure is dissolved and the components become individual objects again so the user can work with the data and structures; wherein subsequent interpretations are made into subsequent topologies which may be closely related to foundation topologies; wherein slight variations are recognized mathematically and perceptually by contrasting past knowledge patterns against current display patterns;

wherein consistency versus slight variation is an essential feature of system performance;

wherein topologies in the symbol state with massive amounts of information inside yet a small description outside look ready to burst, while symbols with infinite complicated and overlapping descriptions but simple information inside is wrinkled, yet from far away both look the same because boundaries are understood differently between users and machines;

wherein each topology has a strict inside/outside boundary with a patterned space of information flowing around it; machines work on the outside compiling the mathematical boundaries and users understand the ideas and information captured inside;

wherein the system generates evolving records to measure boundaries changing as comprehension evolves;

wherein defining the inside versus outside of boundaries is an essential feature of system performance;

wherein during the time users are manipulating, controlling and selecting context to form topologies, the patterned space around components is not perceived by machines as users perceive - in hierarchies with foreground and background - machines always process all of the data in current arrangements in parallel all the way back to each components point of origin;

wherein perception is an essential feature of system performance;

wherein the term parallel is set forth to literally mean only appearing to converge in the distance from users point of view while not actually meeting in machine records, wherein the exclusive right to implement parallel processing as specified is distinctly claimed to ensure the system performs as intended;

wherein defining points of origin is also an essential feature of system performance;

whereby boundaries are stretched and squeezed to fit in hierarchies created and perceived by users until a conclusion is drawn and context is assigned in the form of a new Context Driven Topology that must be unique or it will not be accepted or given space;

wherein patterns are identified and compared across the entire system by machines regardless of their state of participation (symbol, topology or waveform) in and out of knowledge patterns, shared memory, and display patterns because each Context Driven Topology remains mathematically the same to machines regardless of the degree of compactness, expansion and space topologies are perceived to be in by users;

wherein machines use mathematical processes and algorithms to order arrangements only as a reflection of users hierarchical structures but machines only process groups and pathways in and out from the stateless space, not hierarchies depicted in the knowledge and display patterns made for users;

wherein variations in interpretations of data and data arrangements over time generates new forms and boundaries made by advanced networks of machines in addition to user contributions, yet topologies are able to be recognized at any point in time and state of completion because the mathematical relationships never change regardless of the ways data descriptions are stretched and squeezed to fit in new or unique contexts over the years;

wherein recognition during varying stages of completion is an essential feature of system performance;

wherein boundaries are made of vectors able to scale without pixilation because topological structures are based on arcs rather than straight lines, corners, or pixels at any time;

wherein the radius of an arc varies according to the looseness or tightness of the connection between data components and placement in data structures when arcs are drawn by users to define connections to arrange the ideas and information being displayed;

wherein some arcs may have such large radius they appear to be a straight line, but however slight, there is always a curve, adjacent and distant curves may be so overlapped and tangled they do not look like one continuous boundary but a topology is only permitted to be a continuous boundary, otherwise it would just be a set of components rather than a unified topology;

wherein the drawings set forth the requirement there are no corners between arcs, what may appear as a corner is actually a precise rotation in the way the arcs meet; aligning and measuring radii and rotation is the fastest way for machines to compare data and data structures in general before full data and structures are actually retrieved;

wherein arcs, radius, and rotation for general comparison are essential features of system performance;

wherein every boundary is continuous and never breaks down while users are interpreting information of different scales through the topologies directly rather than through the original information ~~itself~~;

wherein components or descriptions are never duplicated in a topology, two or more locations in a structure are simply indicated through maps forming the symbols; wherein the degree to which components are considered to be the same is directed by the user; superimposing two or more topologies that share components across scales does not duplicate matching components either; whether machines are compiling in even parallel across all levels, or users are assigning priorities on specified levels, the topologies where users and machines meet twist and rotate in the stateless space for redundant components to align and cancel each other out both in user displays and machine compilations without breaking down because the boundaries are continuous connections;

wherein canceling out across scales and levels are essential features of system

performance;

wherein the boundaries have no scale because they are every scale as presented by Figures 5, 10 and 1;

wherein topologies and patterned spaces around them form knowledge patterns moving in a multidimensional abstract stream that is difficult to understand without mathematics or being transformed into the evolving automatic audio and visual language, spaces and display patterns disclosed;

wherein self-referring similarities and patterns in the stateless space begin to develop between symbols and the interrelated ways users create underlying connective shapes characterized in Figure 10C at the end of the process, back to Figure 1 at the beginning of the process over and over again;

wherein self-referring similarities, cycles, and underlying structures are a continuous, essential feature of system performance;

wherein knowledge and display pattern maintain unique mathematical identities able to transfer over generations, recognized primarily by machines comparing and measuring the ways historical knowledge and new ideas come together as they are broadcast and compiled;

wherein ideas and information coming together or opposing are made evident through a forced separation of individual change in contrast to a common background of continuous changes over time;

wherein forced separations of changes are essential features of system performance;

wherein the boundaries have no inherent thickness, they are built layer by layer or initially connected arc by arc, using the mathematical description framework, symbols,

signs, and priority addressing of data and data arrangements;

wherein frameworks, symbols, signs, and priority addressing are essential features of system performance;

wherein topologies appear to compress and expand for machines to compile and process in groups where they do not typically belong or easily fit because they do not share past histories and users build bridges to manipulate data and structures to make them fit;

wherein shared memory bridges and manipulation are subject to disputes, challenges and rejection;

wherein as ideas and information persist, working with both knowledge and display patterns cancels out implied thickness for edges to be averaged and revealed as depicted in Figure 3;

wherein determining fit is an essential feature of system performance;

wherein fixed boundaries serve as descriptions linking information together as it is streamlining in and out of the shared memory area of the stateless space;

wherein common backgrounds of topologies are organized across networks by sharing component descriptions, similar placement, knowledge components, algorithms, measurements, and histories of interpretation captured in their properties;

wherein the properties of common backgrounds and histories of interpretation are essential features of system performance;

wherein encapsulating, consolidating and automatically updating the specific

program functions required to read selected data requires data and the means to interpret them are required to be united to perform within the system;

wherein the tools and controls for drawing the boundaries is accomplished through computer graphics processing, operator interface, and selective ~~visual~~ display; wherein the causes and effects of changing boundaries and fixing them into symbols is accomplished ~~through data and network processing~~ by compiling and broadcasting fixed symbols in contrast to fluid waveforms thus context is driving the topology of data structures and known topologies are standardizing for specified data uses.

wherein context driving topology is the central feature of system performance.

Claim 18. (Amended)

The system of claim 17, wherein Context Driven Topologies in the symbol state are tracing histories of previous context and associations;

wherein ~~infinitely large~~ combinations of symbols and component descriptions are ~~overlaid and compared~~ in fixed states;

wherein groups of ~~people~~ users and networks are mapping and emulating fluid continuous histories of hierarchical placements as they are embedding and intertwining between component and configuration descriptions over time;

wherein deriving and assembling histories is compliant with the National Institute of Standards and Technology (NIST) Policy on Traceability contained in the NIST Administrative Manual Subchapter 5.16, online at http://ts.nist.gov/traceability, wherein traceability requires the establishment of an unbroken chain of comparisons to stated references;

wherein no components or descriptions are ever duplicated;

wherein two or more locations are simply indicated as multiple locations in maps of context captured by the symbolic registry system;

wherein if users are in the process of deciding and not ready to choose one component over another yet, only the preferred component is shown on top and similar choices are indicated as a stack waiting behind the preferred component or as transparent components gradually stepping back in resolution as similar objects recede in priority until the user decides, canceling redundant and ~~similar~~ potential background elements;

wherein users define limits on the number of levels and layers presenting, compiling, and being retrieved at any one time by turning layers of information on and off using special controls;

wherein final Context Driven Topologies are captured, and all the layers that are turned off and options that were not chosen are eliminated completely from the fixed assembly.

Claim 19. (Amended)

The system of claim 17, wherein using Context Driven Topologies as pathways to published data is accomplished and assembled into sets accessible to any number of users in the shared memory area of the stateless space;

wherein mathematically perfect copies of fluctuating ideas and information in progress are being handed down from generation to generation comprising both content and the techniques required to read ~~it~~ the ideas and information packaged together in the results;

wherein using the streamlining method, duplicative content or techniques are combined for more efficient processing;

wherein consolidating data and network processing techniques ~~typically~~ utilizes the most

current version first, except where older versions are required for perceiving data in the method it was made.

Claim 20. (Amended)

The system of claim 17, wherein referencing and reusing data more often, from more points of view, causes the descriptions to become more complex, intertwined, and irregular;

wherein data repeatedly interpreted in the same manner emits simple, strong and clear signals easily identified and found by ~~untrained~~ users looking for information with a specified purpose, or accidentally discovering while wandering around different areas of the shared memory;

wherein looking around and spending time in shared memory requires the use of input and display devices connected to a network;

wherein each device participates in the record keeping process;

wherein tools for navigating the stateless space and shared memory are driven by relative location, version management, and dynamic purposes as compared to previously addressed static elements of similar types which are internal elements of memory, per se.

Claim 21. (Previously Presented)

The system of claim 17, wherein using the topologies compares digital objects, spaces, arrangements, and sequences representing new theories and ideas we do not understand with ideas and knowledge we do understand;

wherein revising and improving topologies happens by combining portions of older versions, drawing parallels, creating placeholders, and receiving machine and network

suggestions to achieve clarification and obtain a desired performance.

Claim 22. (Amended)

The system of claim 17, wherein mapping back and forth between known and unknown data configurations over time ~~is generating compact portraits of ideas and~~ depicts~~ing~~ changes in comprehension;

wherein Context Driven Topologies are used to build virtual bridges of understanding to fill in the blanks and bridge the gaps to streamline and compare records of understood ideas and information versus those not understood as depicted in Figure 8 using default spiral forms;

wherein the flow and pace of changes directly corresponds to the pace of changes in knowledge and comprehension idea by idea, relationship by relationship;

wherein users make decisions to place, eliminate, and prioritize data in new data arrangements exemplified in Figures 3 and 4 to understand data and data arrangements that are difficult to configure or draw conclusions from by comparing records that are thoroughly understood against records that are only recently becoming understood, and are not well formed yet;

wherein drawing conclusions is an essential feature of system performance;

wherein capturing user decisions and shared understanding is an essential feature of system performance;

wherein larger perspectives are enabled for history to stop repeating ~~itself~~ so both people and machines are learning from past mistakes.

Claim 23. (Previously Presented)

The system of claim 17, wherein using Context Driven Topologies while discussing new versus old ideas compares previous arrangements;

wherein the life span of knowledge and display patterns, also called filters and templates, is no less than 1,000 years;

wherein subtle variations in topological structure and the automatic audio and visual language are always present in the mathematical patterns because they are constructed and compared for temporal reasons;

wherein aesthetics, proportion, pace, flow, proximity and density become typical, comparable measurements perceivable by machines;

wherein machine measurements and testing enable careful evaluation, periodic maintenance, and long term preservation of data beyond one person, research group, culture, entire field of study, machine, or networks lifetime.

Claim 24. (Amended)

The system of claim 17, wherein sets of knowledge patterns, are ~~generally~~ becoming woven together generally moving backwards in time;

wherein a second set of opposite and related display patterns showing current interests is applied subsequently transforming and simplifying each data arrangement even further;

wherein ~~the inventor Deborah L. MacPherson claims~~ the exclusive right to develop the ~~first set of patterns~~, symbol, and waveform states to run in and out of a stateless space to begin building and further defining the performance requirements for shared memory as specified herein is explicitly claimed; by contrast, the stateless space can not be

maintained, monitored or controlled by any one person or organization, machine or network;

wherein Context Driven Topologies selectively delete data and data arrangements that are not cohesive, valuable, true, interesting, attached to or sharing significant histories with other data and data arrangements;

wherein making and using known opposite or rotated topologies exposes and combats specifically redundant, false or misleading ideas and information as defined by ~~people~~ users who understand and use the data during the times and in the places it is most active;

wherein concurrent and conflicting interpretations are ~~realistically~~ accommodated gradually causing external descriptions and internal components to influence each others position, eventually canceling each other over time, simplifying the shared memory until only the most accurate and accepted versions persist;

wherein redundant, out of date, misleading and incorrect data and data arrangements are eliminated from dynamic shared data stores;

wherein the process of elimination is activated by isolating and identifying non-original copies and non-meaningful variations automatically masking, deleting and concealing excess information using the related patterns to map back and forth from archived to actually used until the redundant, misleading or incorrect information, ideas and techniques are exposed and removed in both the users current data arrangement and across more levels over longer periods of time.

Claim 25. (Previously Presented)

The system of claim 17, wherein connections between data originating deep in the background begins gently pushing, precisely aligning, and locking relative proportion and placement of data and data arrangements into approved groups;

wherein typical group arrangements are causing data to characterize, data relationships are automatically become more organized, settling in and clustering where they fit together best.

Claim 26. (Previously Presented)

A method wherein Context Driven Topologies interact freely in the stateless space in pure form;

wherein the topologies are streamlining and consolidating data into and out of new patterns and forms in shared memory;

wherein fluid multidimensional waveforms are translated out from fixed ~~mathematical~~ symbolic records continuously updating and openly distributing data, similar to existing radio;

wherein new generations of knowledge and display patterns are evolving.

Claim 27. (Amended)

The ~~system~~ method of claim 26, wherein Context Driven Topologies are operating independently from electrical pulses or media being initially powered by being passed around and used for passing stories and songs across generations ~~and~~ propagating ideas and information ~~across the Internet~~;

wherein defined and approved groups of ideas and information are displaying through an evolving automatic language of light and sound, textures, colors and forms;

wherein the language is leading ~~people~~ users and machines to original information ~~precisely~~ regenerated in context;

whereby Context Driven Topologies evolve as interpretation of data and data structures evolve; the topologies are configured knots of information users understand together over networks, the space around a topology represents the constant flow of ideas and information users do not have the capacity to interpret without machines;

wherein the patterned space around topologies forms and changes over time; if the patterned space around a knot of information changes, so will the regeneration of the ideas and information in digital form;

wherein the patterned spaces around knots of information are essential features of system performance;

Claim 28. (Amended)

The ~~system~~ method of claim 26, wherein Context Driven Topologies make~~ing~~ complex digital collections easier ~~for people~~ to look through by driving networked topologies to the ~~highest~~ quality data and structures using optimal techniques, in specified sequences and arrangements against particular backgrounds established by data originators and perfected by subsequent data interpreters;

wherein purer forms lead to faster more wide spread distribution and retrieval.

Claim 29. (Amended)

The ~~system~~ method of claim 26, wherein Context Driven Topologies are becoming like real objects ~~people~~ users form attachments to and begin preferring certain patterns and forms over others;

wherein fine-tuning and control over what data and structures that are searched,

identified and presented for a particular arrangement of information is directly tied to the users preference and quality assurance needs;

wherein each Context Driven Topology is formed to convey authors ideas clearly by being described and arranged to reflect authors reasoning and meet authors technical specifications and aesthetic preferences;

wherein unique configurations and identities are introduced into the stateless space and automatically gravitates toward certain zones in shared memory because of threads and connections to related patterns, placements, histories, and configuration types;

wherein the systems mathematical processes are a form of counting and statistics to reflect preferences;

wherein Context Driven Topologies twist, fold, transform, align and associate waveforms, components, structures and symbols that used to only be captured in users imaginations before these relationships are able to be realized through art, science, machines and advanced networks;

wherein Context Driven Topologies are time capsules of ideas and data processing techniques in unique configurations;

wherein human perception, aesthetics, and performance requirements for networks and machines are all affected through optimized performance and improved definitions of performance requirements;

wherein optimization and the definition of performance requirements are essential features of system performance;

wherein Context Driven Topologies are enabling ~~people~~ users to understand, and causing machines to register, more information about fluidity, objects, spaces, and topologies;

thus forcing the development of new methods of drawing, mapping, specifying performance requirements and improving performance to accurately portray data becoming mixed and separated as they are processed by machines over networks.

Claim 30. (Amended)

~~The system of claims 11, 17, and 26~~, A signal claim wherein Context Driven Topologies are continuously broadcast and kept alive by being referenced over networks using continuous patterns in lieu of storage media and electrical pulses;

wherein broadcast ideas and information carry both content and technique required to regenerate digital information in context, wherein searchers are automatically led to improved results in context by driving networked topologies to the historically highest priority addresses, master recordings, original high resolution still and moving imagery, sounds, partially interpreted or raw results;

wherein topologies identify the locations of genuine events, objects and living beings;

wherein the topologies are capturing pure mathematical relationships not yet associated with images, sounds, words, or assigned values;

wherein the system is helping ~~us, as~~ individuals and ~~a~~ global society~~,~~ to work~~ing~~ with, weed~~ing~~ out, and control~~ling~~ data and structures to create bigger pictures, promoting theory and art making on ~~large~~ GRAND scales using the forms disclosed for ~~a~~ creative, collaborative processes and strategic record keeping to satisfy a spectrum of user needs from simple tasks to goals as lofty as attempts to ~~and~~ capture elusive beauty;

wherefore over enough time, using enough data, the methods set forth show which data

and data arrangements are most interesting, correct, unique and worth preserving for further contemplation using new knowledge and new machines in the future.

END OF CLAIMS 10/803,040